



Ready to Compete?

AUDREY'S TRAFFIC CONTROL COMPETITION

In Honor of Audrey



Audrey Elora Peralta Stewart was born July 21, 1999 in Silver Spring, MD. She earned her B.S. in civil engineering from the University of Alabama in 2021. She worked as a transportation engineer at Arcadis

in Jacksonville, FL, and was a ray of sunshine to work with everyday. She was an avid traveler and visited numerous countries around the world. She traveled to Spain, Portugal, France, Switzerland, Germany, Greece, Italy, Scotland, Denmark, Hungary, Panama, Costa Rica and many more. Visiting new places and seeing different cultures meant everything to her which was evident in her career goals.

She wanted to improve the efficiency and safety of our transportation system to make the world

smaller, so everyone has the opportunity to have these experiences. Audrey was the type of girl who woke up early to see the sun rise and continuously brought people in with her love of life and laughter. It was utter shock to everyone when she passed away peacefully at the age of 23, in February 2023, but her memory lives on in her friends, family, and everyone who was lucky enough to know her. May her spirit and career ambitions continue to live on in each and everyone one of us.

Whether you are already interested in pursuing a career in transportation or just want to see what it's all about - this is the perfect competition for you. It was brainstormed on a girls trip with the goal of being simple and fun. And by participating you are continuing a legacy that was cut too short, so no matter your ranking you can walk away with a sense and pride that you made an impact beyond yourself.



Regional – There is no advancement to a Society-wide national competition for this competition.

Overview

Nationally, two people are killed every day in work zones. To protect our workers, preparing and arranging Temporary Traffic Control (TTC) safely and accurately is important. TTC has three main objectives:

- Safety – Protect roadway users and workers.
- Mobility – Maintain traffic flow and minimize adverse impacts associated with congestion, travel restrictions, and work activities.
- Constructability – Complete the project on time within budget and meeting quality standards.

Successful projects require a carefully considered balance of all three objectives. Standard plans shall be utilized to align with driver expectancy and provide continuity. Familiarity with your state's TTC standards and teamwork skills will be vital when entering the industry as a Traffic Engineer.

Objective

Students are given a construction roadway project scenario at random. They will need to assemble TTC based on the given scenario and the DOT Manual on Uniform Traffic Control Devices (MUTCD). It is a race with a twist... and students will be docked for noncompliance with MUTCD standards and for putting their team at risk / not obeying safety precautions.

Eligibility

Each school may have one (1) team with four (4) students. Each team shall designate one (1) member as Engineer In Charge/Announcer, one (1) member as the Drafter, and two (2) members as the Field Construction Team. A maximum of one (1) graduate student is allowed to participate per team.

Resources

MUTCD Typical Applications can be found here: [MUTCD Manual](#) on pages 857-967 of the manual (pages 93-203 of the PDF)

[CLICK HERE](#) 

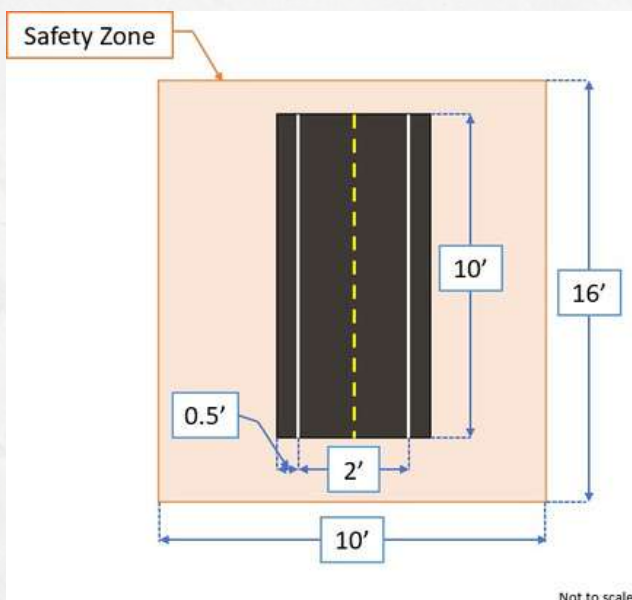
Procedures and Logistics

The scenario will indicate the following:

- What type of roadway facility (e.g. two-lane roadway or multi-lane travel way)
- Location of construction (e.g. eastbound shoulder within 2 feet of travel way)
- Speed of roadway (e.g. 45 mph)



- Time expectancy of construction (e.g. less than 60 minutes)
- Channelization devices will consist of only cones
- The actual roadways will be “scaled” for indoor play. Roadway travel lanes will be 1 foot in width and shoulders will be 0.5-feet in width. The entire travel way will be approximately 10-feet long. Stationing will be placed along the roadway in 1-foot intervals. Each station represents 100 feet. Each team will be provided a “Safety Zone” to not interfere with the other teams play. Please see the competition area diagram below.
- Teams are encouraged to bring a calculator and paper. Teams may also bring their own MUTCD Manual and notes (printed or on an electronic device). Blank Plans Packets will be provided for each team.
- A checklist for the channelization devices and signage will be provided to each team. An example of this checklist is attached.
- The Engineer In Charge and Drafter must complete the checklist following the appropriate MUTCD Typical Applications and will be scored based on accuracy.



Drafted Plans

- The team will be given a set time of 20 minutes to use MUTCD Standards and draft the Temporary Traffic Control Plan

Temporary Traffic Control (TTC) Setup

- The Engineer In Charge must direct the Field Construction Team members to arrange the TTC as quickly and safely as possible. The Drafter may not participate in the TTC Setup. Teams will be given 30 minutes for TTC Setup.
- The Engineer In Charge will provide the completed checklist to the Field Construction Team members. The Field Construction Team members must then collect the appropriate signage and number of channelization devices, which will be located outside of the Safety Zone. Only the Field Construction Team may touch the signage and channelization devices. The Field Construction team is allowed to collect the signage and



channelization devices only ONCE. Points will be docked for extra equipment.

- Field Construction Team members may NOT look at the MUTCD Typical Applications at any time during the TTC Setup; they rely solely on the verbal guidance of the Engineer In Charge and the checklist.
- The final TTC arrangement will be scored on accuracy to the checklist.
- Each team will be exposed to at least one hazard (e.g. an approaching vehicle). The Field Construction team must react in the appropriate safe manner to receive full points.
- Once the Engineer In Charge is confident in the TTC Setup, they must ensure the Field Construction Team is away from the roadway and alert the Judge to stop the clock.

Judging

The team's score will be determined by earning points in the Drafted Plans and Temporary Traffic Control (TTC) Setup categories and then subtracting the time spent in the TTC Setup from the score. The team with the highest score will be the winner.

Important Dates

- Release of Student Symposium Competition Rules and Regulations on November 1, 2024.
2025 ASCE Southeast Student Symposium
- March 6-8, 2025 in Athens, Ga.
- Competition time and location will be released closer to event.

Questions

Requests for information (RFI) must be sent to asce@uga.edu with the subject line "Traffic Control Competition RFI".



Judge Name _____

University Name _____

Drafted Plans

(Evaluated to accuracy of MUTCD Typical Applications)

1.	Correct MUTCD Typical Application Chosen	/200
2.	Channelizing Device Spacing	/200
3.	Taper Length "L"	/200
4.	Work Zone Sign Spacing "X"	/200
5.	Buffer Length "B"	/200
SUBTOTAL 1		/1000

Temporary Traffic Control (TTC) Setup

(Evaluated to accuracy of Drafted Plans)

1.	Channelizing Device Spacing	/200
2.	Channelizing Device Location/Placement	/200
3.	Work Zone Sign Spacing	/200
4.	Work Zone Sign Location/Placement	/200
5.	Correct Signs Used	/200
SUBTOTAL 2		/1000

Final Scoring

Summation of Subtotals 1 and 2	/2000
TTC Time in seconds (To be subtracted from Summation of Subtotals)	
TOTAL (Summation of Subtotals – TTC Time)	



Initial Drafting – Traffic Control Checklist Example

University Name: _____

Circle the most appropriate MUTCD Typical Application that would apply to your scenario:

TA – XX

TA – XX

TA – XX

What was the speed provided to you: _____ mph

What was the duration of construction provided to you: _____ mins or hours (circle one)













Appropriate channelization device spacing (max): _____ feet (Write N/A if not applicable)

Appropriate taper length "L" (min): _____ feet (Write N/A if not applicable)

Work Zone Sign Spacing "X" (min): _____ feet (Write N/A if not applicable)

Appropriate buffer length "B" (min): _____ feet (Write N/A if not applicable)

Write in the total quantity needed for each sign. If you do not need a particular sign, you may leave it blank or write in zero or N/A.

	Total Quantity: _____		Total Quantity: _____		Total Quantity: _____
	Total Quantity: _____		Total Quantity: _____		Total Quantity: _____
	Total Quantity: _____		Total Quantity: _____		Total Quantity: _____
	Total Quantity: _____		Total Quantity: _____		Total Quantity: _____